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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR              | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------------------|---------------------|------------------|
| 10/085,669      | 02/27/2002  | Adrianus Alphonsus Jozef Buijsman | NL010158            | 8647             |

7590 10/03/2002  
U.S. Philips Corporation  
580 White Plains Road  
Tarrytown, NY 10591

EXAMINER

SCHILLINGER, LAURA M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2813

DATE MAILED: 10/03/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/085,669

Applicant(s)

BUIJSMAN ET AL. 

Examiner

Laura M Schillinger

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4&5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-3,5-6 and 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamauchi et al ('672).

In reference to claim 1, Yamauchi teaches a module comprising a substrate with a side (Fig.1 (6), a semiconductor device (Fig.1 (2), a shield of an electrically conducting material (Fig.1 (9)), and an antenna (Fig.1 (7)), said shield being present between the antenna and the semiconductor device, characterized in that the shield and the antenna are present substantially at the same side of the substrate as is the semiconductor device (Col.8, lines: 20-25)

In reference to claim 2, Yamauchi teaches characterized in that the shield is connected to the antenna by a support means (Fig.1 (8a)).

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In reference to claim 3, Yamauchi teaches characterized in that the shield and the antenna are metal plates which each comprise a first, second and third portions – the second portion adjoining the first and third and being oriented parallel to the substrate, while at least one of the first and third portions is connected with electrical conduction to electrical conductors at one of the sides of the substrate (Fig.3 (7 and 9)).

In reference to claim 5, Yamauchi teaches in that the support means is a strip having a first and second end which is undetachably connected at its first end to the metal plate of the antenna and is fastened at its second end to the shield (Fig.1 (8a)).

In reference to claim 6, Yamauchi teaches in that the third portion of the antenna is provided with teeth which are connected to the electrical conductors at one of the sides of the substrate (Fig.1 (8)).

In reference to claim 7, Yamauchi teaches the shield is a metal plate which comprises a first, second and third portion the second portion adjoining the first and the third and being oriented parallel to the substrate, while at least one of the first and third portions is connected with electrical conduction to electrical conductors at one of the sides of the substrate and the support means fastened on the shield (Fig.1 (9)).

In reference to claim 8, Yamauchi teaches in that the support means is the carrier of the antenna and of the shield (Fig. 1 (8a)).

In reference to claim 9, Yamauchi teaches in that the support means comprises a first, second and third portions – the second portion adjoining the first and third and being oriented parallel to the substrate, while at least one of the first and third portions is connected with electrical conduction to electrical conductors at one of the sides of the substrate, while the first and third portions extend up to the substrate (Fig.1 8 and 8a)).

In reference to claim 10, Yamauchi teaches the device of claim 1 (Col.21, lines: 10-20).

In reference to claim 11, Yamauchi teaches wherein a carrier is present on the module and at least one component emits radiation during operation and the height of the module is greater than the component (See Col.1, lines: 20-30 and Col.21, lines: 60-65).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al ('672) as applied to claims above, and further in view of Nagata et al ('173).

In reference to claim 4, Yamauchi fails to teach in that the support means comprises a rubbery, electrically insulating material.

In reference to claim 7, Yamauchi teaches the shield is a metal plate which comprises a first, second and third portion the second portion adjoining the first and the third and being oriented parallel to the substrate, while at least one of the first and third portions is connected with electrical conduction to electrical conductors at one of the sides of the substrate and the support means fastened on the shield (Fig.1 (9)); however fails to teach support means comprises a rubbery, electrically insulating material.

However, Nagata teaches a similar structure wherein antenna (7) is supported by a dielectric in order to improve transmission characteristics through concentrating the electromagnetic field (Col.s 9-10, lines: 10-50).

It would have been obvious to one of ordinary skill in the art to modify Yamauchi's teachings to include an interfacial dielectric in order improve transmission characteristics because interference could develop between Yamauchi's layers 8a and 7 because an electromagnetic signal would be transferred through them.

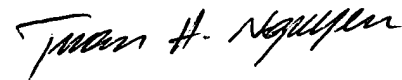
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (703) 308-6425. The examiner can normally be reached on M-F 7:00 -4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on (703) 306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1500.

LMS  
September 30, 2002



**Tuan H. Nguyen**  
**Primary Examiner**